SECTION 10430

SIGNAGE

LANL MASTER CONSTRUCTION SPECIFICATION

When editing to suit project, author shall add job-specific requirements and delete only those portions that in no way apply to the activity (e.g., a component that does not apply). To seek a variance from applicable requirements, contact the ESM Architectural POC.

When assembling a specification package, include applicable sections from all Divisions, especially Division 1, General Requirements.

Delete information within "stars" during editing.

Section developed for ML-3 / ML -4 projects. For ML-1 / ML-2, additional requirements and QA reviews are required.

This specification is required for new installations.

Designer: Coordinate this spec with Architectural Standard Detail ST-G2040-4 (use needed sheets)

PART 1 GENERAL

- 1.1 SECTION INCLUDES
 - Exterior signs of the following types. Α.

[Edit list to reflect actual signs used in project]

- 1. Facilities
- 2. Technical Area
- 3. Operations and Divisions
- 4. Freestanding Building Identification
- 5. On Building Identification Lettering
- 6. On Building Identification Plaques
- 7. Regulatory Safety and Security
- 8. Regulatory Trail and Transit
- 9. Interpretive and Route Markers

1.2 SUBMITTALS

- A. Submit in accordance with the requirements of Section 01330.
 - 1. Product Data: Submit product data for specified products. Include material details for each sign specified.
 - 2. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including dimensions, anchorage, and accessories.
 - 3. Samples: Submit color samples for verification purposes.

1.3 QUALITY ASSURANCE

- A. Supplier: Obtain all products from a single supplier.
- B. Regulatory Requirements: Products shall meet requirements of the <u>Americans</u> with <u>Disabilities Act Accessibility Guidelines (ADAAG)</u> and <u>Manual on Uniform Traffic Control Devices (MUTCD)</u>.
- C. Installer: Installation shall be performed by installer specialized and experienced in work similar to that required for this project.
- D. Closeout Submittals: Submit operation and maintenance data for installed products, including precautions against harmful cleaning materials and methods and warranty documents.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Comply with ordering instructions and lead-time requirements to avoid construction delays.
- B. Deliver products in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Store products protected from weather, temperature, and other harmful conditions as recommended by supplier.
- D. Handle products in accordance with manufacturer's instructions.

1.5 WARRANTY

A. Product Warranty: Provide standard manufacturer's material and workmanship warranty and installation workmanship warranty of minimum 1 year.

PART 2 PRODUCTS

2.1 SIGNAGE SYSTEMS AND CUSTOM LETTERING /PLAQUES

- A. Acceptable Manufacturers:
 - 1. ASI Sign Systems, No Substitutions http://www.asimodulex.com
- B. Acceptable Product:
 - 1. ASI Compass Series Exterior Panel Sign System
- C. Graphic Process:
- - 2. Graphic technique: Vinyl Die Cut and paint
 - 3. Text or graphic colors:

Edit list to reflect requirements of project

- a. White Premium 3M vinyl Reflective
- b. Black Premium 3M vinyl Reflective
- c. Blue Premium 3M vinyl to match Pantone Matching System (PMS) #3025U
- d. Scotchcal Bright Yellow 3622 vinyl
- e. Logo: painted to match PMS 8240 Metallic

2.2 SIGN MATERIALS AND COMPONENTS

- A. Materials and Components:
 - 1. Aluminum Panels: Meeting ASTM B209, alloy EN 5052 H12, minimum 0.125" thick.
 - 2. Aluminum Extrusions: Meeting ASTM B221, alloy 6063-T5.

- 3. Accessories: Provide end caps, couplings, coupling fittings, mounting fittings, interchangeable fittings, and other hardware and accessories for a complete installation.
- 4. F.C.O. Aluminum Letters: Meeting ASTM B209, alloy EN 5052 H12, minimum 0.5" thick.
- B. Finish: Standard two-phase, high temperature cured polyester color coating as follows:
 - 1. Primer: 2 mil thick layer for optimum surface coat adhesion and weatherability.
 - 2. Top Coat: two components, water-based, non-toxic, zero emissions, high temperature cured polyester coating, 2-3 mil thickness.

3.	Colors:
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[Ed	dit list to reflect project requirements]

- a. Matthews Acrylic Polyurethane (MAP) Satin Gloss to match PMS #3025U Blue.
- b. MAP Satin Gloss 30136 Brushed Aluminum.
- MAP Satin Gloss 30132 Black.
- d. MAP Satin Gloss 23966 Red.
- e. MAP Satin Gloss 10210 Yellow.

2.3 FABRICATION – GENERAL

- A. General: Comply with requirements indicated on the drawings for materials, thickness, finish, colors, designs, shapes, sizes, and details of construction.
- B. Design, fabricate, and install sign assemblies to prevent buckling, opening of joints, and over-stressing of welds and fasteners.
- C. Mill joints to a tight, hairline fit. Form joints exposed to the weather to exclude water penetration.
- D. Pre-assemble signs in the shop to the greatest extent possible to minimize field assembly. Disassemble signs only as necessary for shipping and installation.
- E. Conceal fasteners if possible; otherwise, locate fasteners to appear inconspicuous.

- F. Coordinate dimensions and attachment methods to produce message panels closely fitting joints. Align edges and surfaces with one another in the relationship indicated.
- G. Increase material thickness or reinforce with concealed stiffeners or backing materials as required to produce surfaces without distortion, buckles, warp, or other surface deformations.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Site Verification of Conditions: Verify conditions for type of installation methodology, and proper engineering.
- B. Coordinate and schedule installation with other site work activities.
- C. Verify that substrate and conditions are ready for product installation.

3.2 INSTALLATION

- A. Install product in accordance with fabricator's instructions, engineering specifications, and drawings.
- B. Install product in locations indicated on the drawings using mounting methods recommended by sign manufacturer, free from distortion, warp, or defect adversely affecting appearance, functionality or warranty.
- C. Install product level, plumb, and at height indicated.
- D. Install product at heights and distances from road edge or intersection per Manual on Uniform Traffic Control Devices (MUTCD) and applicable local amendments and regulations.
- E. Install signs in accordance with manufacturer's recommendations.

3.3 CLEANING, PROTECTION, AND REPAIR

- A. Repair scratches and other damage, which might have occurred during installation. Replace components where repairs were made but are still visible to the unaided eye from a distance of 10 feet.
- B. Remove temporary coverings and protection to adjacent work areas. Clean installed products in accordance with Contract provisions.

3.4 SIGN SCHEDULE

A. Schedule: Refer to the Contract Drawings for locations, copy and sizes.

END OF SECTION

Do not delete the following reference information:	

FOR LANL USE ONLY

This project specification is based on LANL Master Construction Specification Rev. 0, dated May 3, 2004.